

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| | | |
|---|---|--|
| TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371 | | ATTORNEY'S DOCKET NUMBER 31229-231165 U.S. APPLICATION NO. (if known) see 37 CFR 1.5) 107580455 No. Yet Assigned |
| INTERNATIONAL APPLICATION NO. PCT/GB2004-004814 | INTERNATIONAL FILING DATE 17 November 2004 | PRIORITY DATE CLAIMED 28 November 2003 |
| TITLE OF INVENTION IMPROVEMENTS FOR FUEL COMBUSTION | | |
| APPLICANT(S) FOR DO/EO/US Nigel David TIMMS and Baljit SINGH | | |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: | | |
| <p>1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a submission under 35 U.S.C. 371.</p> <p>2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371.</p> <p>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</p> <p>4. <input type="checkbox"/> The US has been elected (Article 31).</p> <p>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) WO 2005/054658 A1. <ul style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> has been communicated by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). </p> <p>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). <ul style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). </p> <p>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ul style="list-style-type: none"> a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input checked="" type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. </p> <p>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</p> <p>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</p> <p>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</p> | | |
| Items 11 to 20 below concern document(s) or information included: | | |
| <p>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98 with Form PCT/IB/308A.</p> <p>12. <input checked="" type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is</p> <p>13. <input checked="" type="checkbox"/> A preliminary amendment.</p> <p>14. <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</p> <p>15. <input type="checkbox"/> A substitute specification.</p> <p>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</p> <p>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825.</p> <p>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</p> <p>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</p> | | |

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| | | | | |
|--|--|---|--|-------------|
| U.S. APPLICATION NO. (if known, see 37 CFR 1.51) | INTERNATIONAL APPLICATION NO. PCT/GB2004-004814 | | ATTORNEY'S DOCKET NUMBER 31229-231165 | |
| 20. <input checked="" type="checkbox"/> Other items or information: Return Receipt Postcard Submission of Formal Drawings Transmittal with 54 sheets of drawings, Figs. 1-54 International Search Report Form PCT/ISA/220 Form PCT/ISA/237 (Written Opinion of The International Searching Authority) Form PCT/IB/311 and Forms PCT/RO/101 | | | | |
| The following fees have been submitted | | | CALCULATIONS | PTO USEONLY |
| 21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a)) \$300 | | | \$ 300.00 | |
| 22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) \$0 All other situations \$200 | | | \$ 200.00 | |
| 23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) \$0 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority \$100 International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB \$400 All other situations \$500 | | | \$ 400.00 | |
| TOTAL OF 21, 22 and 23 = | | | \$ 900.00 | |
| <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. | | | | |
| Total Sheets | Extra Sheets | Number of each additional 50 or fraction thereof (round up to a whole number) | RATE | |
| - 100 = | /50 = | | x \$250.00 | |
| Surcharge of \$130 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)). | | | \$ | |
| CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | |
| Total claims | 18 - 20 = | | x | 0.00 |
| Independent claims | 5 - 3 = | 2 | x 200.00 | 400.00 |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable) | | | + | |
| TOTAL OF ABOVE CALCULATIONS = | | | \$ 1,300.00 | |
| <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½. | | | | |
| SUBTOTAL = \$ 1,300.00 | | | | |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). | | | | |
| TOTAL NATIONAL FEE = \$ 1,300.00 | | | | |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property | | | | |
| <input type="checkbox"/> TOTAL FEES ENCLOSED = \$ 1,340.00 | | | | |
| | | | Amount to be refunded: | \$ |
| | | | Amount to be charged | \$ 1,340.00 |

10/580455

14P9 Rec'd PCT/PTO 24 MAY 2006

PTO-1390 (Rev. 07-2005)

Approved for use through 03/31/2007. OMB 0651-0021

U. S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

- a. A check in the amount of \$ _____ to cover the above fees is enclosed.
- b. Please charge my Deposit Account No. 22-0261 in the amount of \$ 1,340.00 to cover the above fees.
A duplicate copy of this sheet is enclosed.
- c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 22-0261. A duplicate copy of this sheet is enclosed.
- d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

MAY 24, 2006



SIGNATURE

SEND ALL CORRESPONDENCE TO:

CUSTOMER NUMBER: 26694

Michael A. Sartori, Ph.D.

NAME

41,289

REGISTRATION NUMBER

#753368

10/580455

App. Recd PCT/PTO 24 MAY 2006

PTO/SB/17 (01-06)

Approved for use through 7/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL

For FY 2006

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 1,340.00)

| Complete if Known | |
|----------------------------------|-----------------------|
| Application Number | Not Yet Assigned |
| Filing Date | Concurrently Herewith |
| First Named Inventor | Nigel David TIMMS |
| Examiner Name | Not Yet Assigned |
| Art Unit | Not Yet Assigned |
| Attorney Docket No. 31229-231165 | |

METHOD OF PAYMENT (check all that apply)

| | | | | |
|---|--------------------------------------|--------------------------------------|-------------------------------|---|
| <input type="checkbox"/> Check | <input type="checkbox"/> Credit Card | <input type="checkbox"/> Money Order | <input type="checkbox"/> None | <input type="checkbox"/> Other (please identify): _____ |
| <input checked="" type="checkbox"/> Deposit Account | | Deposit Account Number: 22-0261 | | Deposit Account Name: Venable LLP |

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

| | |
|---|---|
| <input checked="" type="checkbox"/> Charge fee(s) indicated below | <input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee |
| <input checked="" type="checkbox"/> Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17 | <input checked="" type="checkbox"/> Credit any overpayments |

FEE CALCULATION (All the fees below are due upon filing or may be subject to a surcharge.)

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

| Application Type | FILING FEES | | SEARCH FEES | | EXAMINATION FEES | | |
|------------------|-------------|-----------------------|-------------|-----------------------|------------------|-----------------------|----------------|
| | Fee (\$) | Small Entity Fee (\$) | Fee (\$) | Small Entity Fee (\$) | Fee (\$) | Small Entity Fee (\$) | Fees Paid (\$) |
| Utility | 300 | 150 | 500 | 250 | 200 | 100 | |
| Design | 200 | 100 | 100 | 50 | 130 | 65 | |
| Plant | 200 | 100 | 300 | 150 | 160 | 80 | |
| Reissue | 300 | 150 | 500 | 250 | 600 | 300 | |
| Provisional | 200 | 100 | 0 | 0 | 0 | 0 | |

2. EXCESS CLAIM FEES

Fee Description

Each claim over 20 (including Reissues)

| | |
|---------------------|-----------------|
| Small Entity | |
| Fee (\$) | Fee (\$) |

50 25

Each independent claim over 3 (including Reissues)

200 100

Multiple dependent claims

360 180

| | | | | |
|---------------------|---------------------|-----------------|----------------------|----------------------------------|
| Total Claims | Extra Claims | Fee (\$) | Fee Paid (\$) | Multiple Dependent Claims |
| 18 | - 20 = | x | = | |

HP = highest number of total claims paid for, if greater than 20.

| | | | | |
|----------------------|---------------------|-----------------|----------------------|--------|
| Indep. Claims | Extra Claims | Fee (\$) | Fee Paid (\$) | |
| 5 | -3 = | 2 | x 200.00 = | 400.00 |

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

| | | | | |
|---------------------|---------------------|---|-----------------|----------------------|
| Total Sheets | Extra Sheets | Number of each additional 50 or fraction thereof | Fee (\$) | Fee Paid (\$) |
| - 100 = | /50 | (round up to a whole number) x | = | |

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): 8021 Recording each patent assignment, agreement or ... 40.00

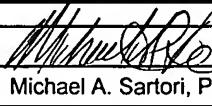
300.00

1631 Basic National Stage fee 400.00

1642 National Stage Search Fee - search report ... 400.00

1633 National Stage Examination Fee - all other ... 200.00

SUBMITTED BY

| | | | | | |
|-------------------|---|-----------------------------------|--------------|-----------|----------------|
| Signature |  | Registration No. (Attorney/Agent) | 41,289 | Telephone | (202) 344-4000 |
| Name (Print/Type) | Michael A. Sartori, Ph.D. | Date | May 24, 2006 | | |

#753444

10/580455

IAPS Rec'd PCT/PTO 24 MAY 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | |
|---|---|
| In re application of: Nigel David TIMMS et al. | International Application No.: PCT/GB2004/004814 |
| Appl. No.: Not Yet Assigned | International Filing Date: November 17, 2004 |
| Art Unit: Not Yet Assigned | |
| Confirmation No.: Not Yet Assigned | Examiner: Not Yet Assigned |
| Filed: Concurrently Herewith | Atty. Docket No.: 31229-231165 |
| For: IMPROVEMENTS FOR FUEL COMBUSTION | Customer No. 26694 PATENT TRADEMARK OFFICE |

Submission Of Formal Drawings

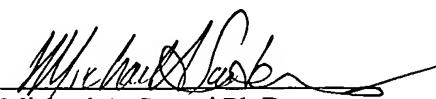
Commissioner of Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith are 54 sheets of formal drawings containing Figures 1a-1c, 2a-2c, 3a-3c, 4a-4c, 5a-5c, 6a-6c, 7a-7c, 8a-8c, 9a-9c, 10a, 10b, 11a, 11b, 12, 13a-13c, 14a-14c, 15a, 15b, 16a, 16b, 17a-17c, 18a, 19a, 19b and 20-25.

Respectfully submitted,

Date: May 24, 2005


Michael A. Sartori Ph.D.
Registration No. 41,289
VENABLE LLP
P.O. Box 34385
Washington, D.C. 20043-9998
Telephone: (202) 344-4000
Telefax: (202) 344-8300

#753415